

## PROGRAMS OF STUDY: WHAT

# “MATURE”

SITES TELL US

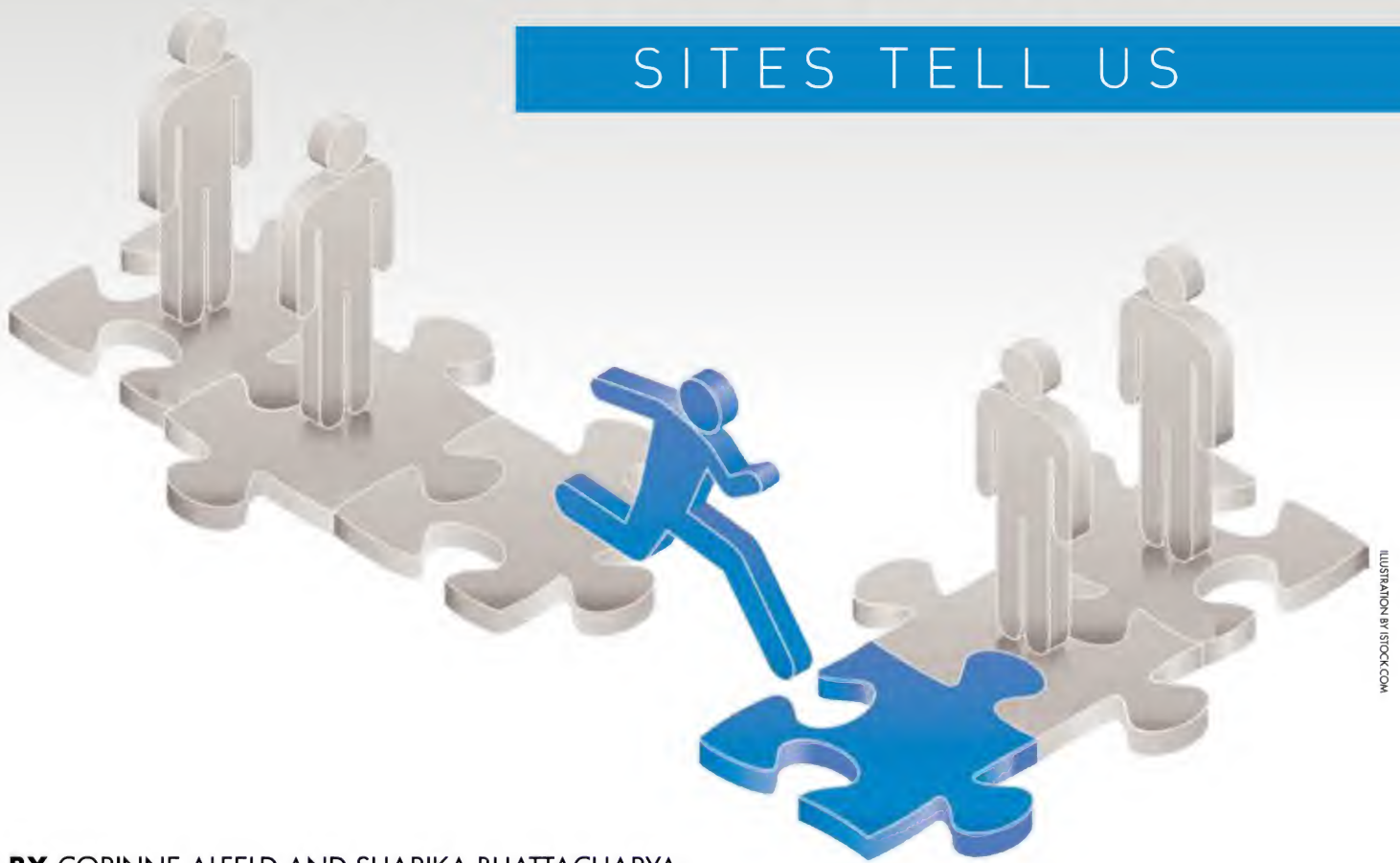


ILLUSTRATION BY ISTOCK.COM

**BY CORINNE ALFELD AND SHARIKA BHATTACHARYA**

**A**lthough career and technical education (CTE) Programs of Study (POS) were introduced in the Perkins IV legislation, neither the spirit nor the elements of POS are new in the history of CTE as a vehicle for high school reform. POS have evolved over several decades of efforts to create effective transition programs from

secondary to postsecondary education or the workforce. Initiatives of the 1990s like youth apprenticeships, School-to-Work, and Tech Prep all provided elements that formed the basis for POS, including an increasing emphasis on the integration of academic and technical skills (Lewis and Kosine, 2008). POS are a natural extension of these efforts.

### Site Selection

As POS are relatively new, in name if not in practice, research evidence on their implementation and effectiveness is still in progress (see other articles in this issue). At the request of the Office of Vocational and Adult Education (OVAE), U.S. Department of Education, and the National Research Center for Career and Techni-

cal Education, researchers at the National Institute for Workforce and Learning began a study in 2008 to examine “mature” POS-like sites around the country, to learn about how they were developed and how they work.

We solicited nominations for sites to study from a variety of knowledgeable stakeholders. (For a description of the study’s method and preliminary observation findings, see the article “POS: Observations on Process and Structure” in the January 2010 issue of *Techniques*.) Three sites were selected that met the criteria, primarily consisting of evidence of a strong secondary-postsecondary partnership with students moving from the high school to the college in a CTE program. Dual enrollment was a critical piece at the secondary level. The three selected sites are geographically, demographically, and programmatically diverse (see below). Each is anchored by a community college with multiple (between six and 12) feeder high schools.

After a site selection process that included site visits and interviews, the longitudinal study began in early 2009. Over the last three years, we have conducted additional site visits for each of the mature POS to interview administrators and faculty at the high school and college levels, as well as advisory committee members from the business community. These interviews and observations provided information for rich case studies of individual sites as well as the opportunity to compare and contrast across sites and with Perkins IV (more detail is available in the *Techniques* January 2010 article and

in a forthcoming issue of the *International Journal of Educational Reform*).

## Interview Findings

Overall, we found that the “mature” POS sites that we studied had successfully surmounted various barriers to developing POS over a timeframe of at least nine years. Common key elements of these mature POS include: (1) resources (primarily provided by the college) for staff dedicated to creating and maintaining POS relationships with high schools; (2) active business and industry advisory groups; and (3) uniquely tailored and flexible dual enrollment arrangements. Finally, at each site, high school and college leaders share a vision of seamless student transitions that ultimately benefit students, the college and the local economy. Without sustained attention to these aspects of partnership, these sites may not have been able to navigate the bumpy road to achieve mature POS.

On the other hand, because the programs were established before POS were legally introduced, they cannot be expected to meet all of the goals of POS. We did find some weaknesses when we retrospectively compared the programs to the 10 elements in the POS Framework released by OVAE in the second year of our study.<sup>1</sup> For example, both the qualitative and the quantitative data (see page 34) suggested that the role of high school counselors in career guidance could be improved. Furthermore, data systems for tracking students across educational levels were not yet well-coordinated. For the purposes of the research study, we

## Research Questions

1. What are the key elements of mature secondary-postsecondary career pathways? Who are the key players? What are the key policies and processes?
2. How do the key elements map back onto the Perkins IV legislation on POS?
3. What are the educational and career pathways of students who begin a POS in high school? Do they continue in college? What happens to students who do not continue in the POS in college?

collected transcript data from the high schools and the colleges and were able to track educational pathways for participating students who had transitioned to the affiliated college; however, such efforts were not being undertaken by administrators unless specific programs required the information for reporting, marketing or program improvement purposes.

## Student Survey Findings

To understand students’ perspectives and how they progress through these mature POS from high school to college, we administered surveys to high school juniors and seniors in each of the selected POS sites beginning in 2009. It should be kept in mind that the students who responded to the surveys are not necessarily representative of all students in their POS, let alone of POS students in general. However, their answers serve to complement the qualitative data.

## Selected Mature Programs of Study Sites

Masked Site Name	Location	2002 City Population	Programs of Study Selected for Research
“River College”	Midwest/South	55,745	Industrial Maintenance, Mechatronics
“Desert College”	Southwest	529,219	Film Tech, Culinary Arts, Construction Technology
“Northern College”	North Midwest	67,145	Automotive Technology, Welding



---

**“However, in our opinion, the measure of success for POS should not be defined by the rate at which students are guided into specific career paths or specific programs, but should instead be based on the capacity POS have for providing students with the ability to make future educational and career decisions using the skills they gained through their participation.”**

---

**High School.** At the high school level, we found the following:

- Only about half (52 percent) of the 219 students surveyed reported that their high school POS was the one in which they were most interested.
- Most (63 percent to 84 percent) agreed or strongly agreed that being in a POS made them more engaged in school and in preparing for a career.
- 81 percent agreed or strongly agreed that their POS “made me focus my studies so I know where I am headed.”
- High school participants tended to discuss course planning most frequently with friends (96 percent), compared to parents (90 percent), teachers (83 percent), and guidance counselors (61 percent).
- However, parents were rated most helpful in course planning (31 percent, compared to friends at 18 percent); more students reported “no one” (21 percent) as being helpful over guidance counselors (17 percent) or teachers (13 percent).
- Only 32 percent had participated in a meeting with a parent and a counselor together regarding course planning.
- For the 61 percent of students who reported participating in work-based learning (e.g., internship, job shadowing, community service), less than one-third (30 percent) considered these experiences to be closely related to their future career.

- Even fewer students (21 percent) reported that their paid jobs were at least somewhat related to chosen careers.
- Students’ high school transcripts indicate that at the River College site, eight students (17 percent of that sample) had earned a certificate in their POS area by the end of high school.

**College.** Because we were interested in whether and how students made the transition to the postsecondary portion of their POS, we followed them as they left high school and began college. Based on enrollment records, we learned that of the original 219 students, 73 (33 percent) attended the affiliated college (*i.e.*, the college that was part of our study) after high school. Of this group, 33 (45 percent) stayed in the same POS they were in during high school (this constituted 15 percent of the original sample). The remainder either:

1. did not go to college at all after high school;
2. went to other colleges; or
3. went to the affiliated college but did not stay in the same POS area (though 12 percent of this group stayed in a similar career cluster, based on their declared majors).

When we surveyed all students enrolled in the selected college programs, regardless of whether they were in our

original sample (response N = 139), the most compelling findings included:

- Students who had attended one of the high schools in our study with a mature POS were more likely (29 percent) than students from other high schools (17 percent) to report that they felt “very prepared” for college-level studies;<sup>2</sup>
- Three-quarters of all students in the selected college programs agreed or strongly agreed that their CTE training helped them decide to continue their education after high school.

## Conclusions

Whereas there is certainly room for improvement in these mature POS, the fact that almost half of the high school students (even more when examining career clusters rather than specific POS) who transitioned to the affiliated college remained in the same POS is testament to the strength of these POS. It is not surprising that, at this developmental stage, two-thirds of the students in our study scattered after high school. (Recall that only half of high school students surveyed in this study reported that the POS they were in was the one of most interest to them.)

However, in our opinion, the measure of success for POS should not be defined by the rate at which students are guided into specific career paths or specific programs, but should instead be based on the capacity POS have for providing students with the ability to make future educational and career decisions using the skills they gained through their participation. (Recall that 80 percent of POS students surveyed in this study agreed or strongly agreed that their POS “made me focus my studies so I know where I am headed.”) If these are the intended outcomes of POS under Perkins IV, then whether students continue in a given career path or choose another may be less important.

Based on the findings from this study,

we are cautiously optimistic about the promise of POS to facilitate students' transitions from high school to postsecondary education and careers. Whether or not students follow a single path, POS have the potential to create a more tangible future (or set of possible futures) for students by giving them structure. Through POS offerings and career guidance about a range of education and career options beyond high school, students can be better prepared to achieve college and career success. **I**

## Endnotes

- 1 <http://cte.ed.gov/nationalinitiatives/rposdesignframework.cfm>
- 2 This comparison should be interpreted with caution due to small and unequal sample sizes.

## References

Lewis, M. V., and Kosine, N. R. (with Overman, L.). (2008, October). "What Will be the Impact of Programs of Study? A Preliminary Assessment Based on Similar Previous Initiatives, State Plans for Implementation, and Career Development Theory." Louisville, KY: National Research Center for Career and Technical Education, University of Louisville.

## Acknowledgments

The work reported herein was supported under the National Research Center for Career and Technical Education (PR/Award No. VO51A070003) as administered by the Office of Vocational and Adult Education, U.S. Department of Education. However, the contents do not necessarily represent the positions or policies of the Office of Vocational and Adult Education or the U.S. Department of Education and you should not assume endorsement by the federal government.

Corinne Alfeld, Ph.D.,

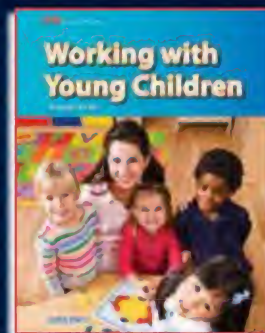
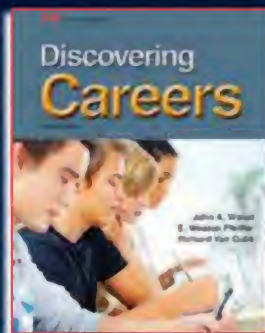
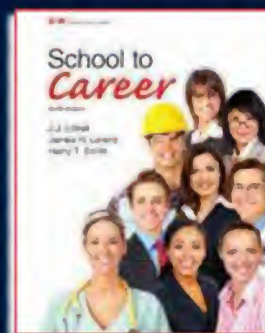
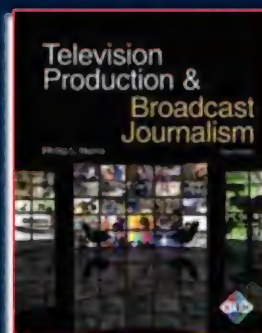
is a senior researcher with the National Institute for Work and Learning at FHI 360. She can be contacted at [calfeld@fhi360.org](mailto:calfeld@fhi360.org).

Sharika Bhattacharya, Ph.D.,

is a researcher with the National Institute for Work and Learning at FHI 360. She can be contacted at [sbhatt@fhi360.org](mailto:sbhatt@fhi360.org).

# Content for **SUCCESS**

Accurate | Authoritative | Dynamic



Choose **G-W**, the best products  
for Career and Technical Education



Goodheart-Willcox Publisher  
[www.g-w.com](http://www.g-w.com) • 800.323.0440